STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 134468

TO: Sharmila Gollamudi
Location: REM/4B11/4C70
Art Unit: 1616
October 6, 2004

Case Serial Number: 09/733640

From: P. Sheppard
Location: Remsen Building
Phone: (571) 272-2529

sheppard@uspto.gov

Search Notes

WO 98/44021

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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 09:05:18 ON 06 OCT 2004
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FILE COVERS 1907 - 6 Oct 2004  VOL 141 ISS 15
FILE LAST UPDATED: 4 Oct 2004  (20041004/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


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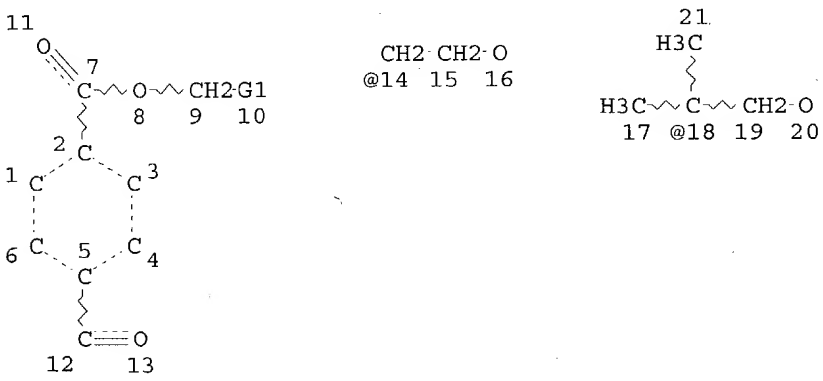


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GRAPH ATTRIBUTES:
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NUMBER OF NODES IS  21

STEREO ATTRIBUTES: NONE
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L4          1440 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3
L5           522 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 AND PD=<DECEMBER 8, 2000
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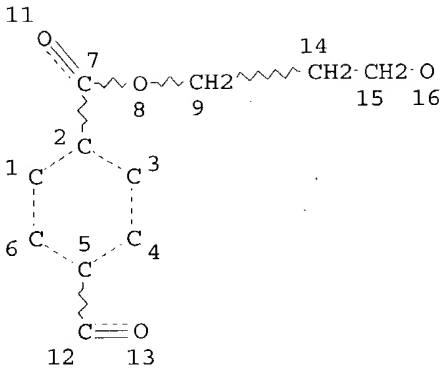

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NUMBER OF NODES IS 15

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L11         10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 AND L10
L12          9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 AND L5
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L12 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:706959 HCAPLUS
DOCUMENT NUMBER: 133:286466
TITLE: Methods and compositions based on poly(phosphoesters) for treating solid tumors
INVENTOR(S): Dang, Wenbin; Garver, Robert I., Jr.
PATENT ASSIGNEE(S): Guilford Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000057852	A2	20001005	WO 2000-US7304	20000320 <--
WO 2000057852	A3	20010215		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6537585	B1	20030325	US 1999-276866	19990326
EP 1185249	A2	20020313	EP 2000-916536	20000320
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009213	A	20020416	BR 2000-9213	20000320
TR 200102801	T2	20020422	TR 2001-200102801	20000320
JP 2002540137	T2	20021126	JP 2000-607603	20000320
NO 2001004662	A	20011120	NO 2001-4662	20010925
US 2003203033	A1	20031030	US 2003-357292	20030203
PRIORITY APPLN. INFO.:			US 1999-276866 A	19990326
			WO 2000-US7304 W	20000320

AB A biodegradable polymer composition comprises: (a) a poly(phosphoester) biodegradable polymer and (b) at least one antineoplastic agent in an amount effective to inhibit the growth of a solid tumor, which is suitable for intratumoral administration to treat a mammal having a solid tumor. For example, paclitaxel was blended with copolymers of 1,4-cyclohexane dimethanol and hexyl phosphorodichloridate (poly(CHDM-HOP)) or Et phosphorodichloridate (poly(CHDM-EOP)) at a 10% loading level and 5 mg of each formulation was incubated with 1 mL of a buffer mixture of 80% PBS and 20% PEG 400 at 37° for 26 days. The total paclitaxel recovery was 65% for the poly(CHDM-HOP) formulation and 75% for the poly(CHDM-EOP) formulation.

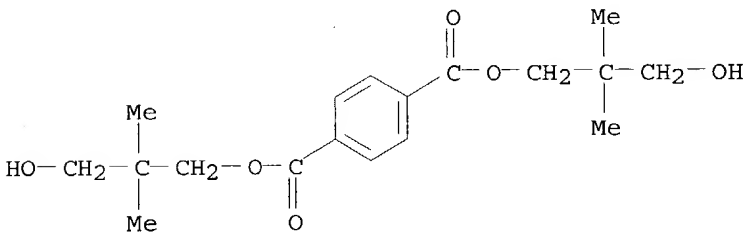
IT **214397-86-1 214397-87-2 214397-89-4**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(biodegradable poly(phosphoesters) for intratumoral sustained release of antitumor drugs for solid tumors)

RN 214397-86-1 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxy-2,2-dimethylpropyl) ester, polymer with 1,4-benzenedicarbonyl dichloride and ethyl phosphorodichloridate (9CI) (CA INDEX NAME)

CM 1

CRN 24806-01-7
CMF C18 H26 O6



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CRN 1498-51-7
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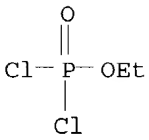
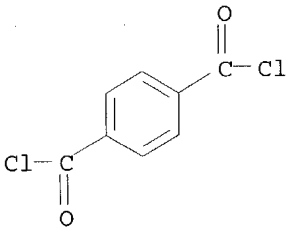


CM 3

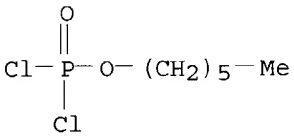
CRN 100-20-9
CMF C8 H4 Cl2 O2



RN 214397-87-2 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxy-2,2-dimethylpropyl) ester, polymer with 1,4-benzenedicarbonyl dichloride and hexyl phosphorodichloridate (9CI) (CA INDEX NAME)

CM 1

CRN 53121-39-4
CMF C6 H13 Cl2 O2 P



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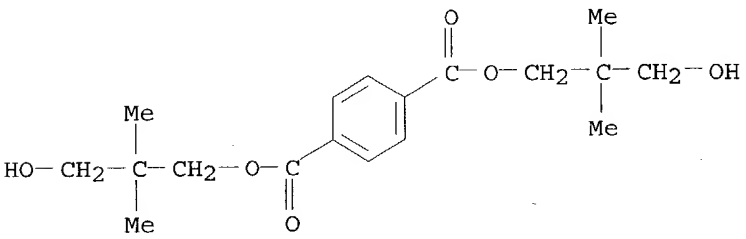

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CRN 100-20-9
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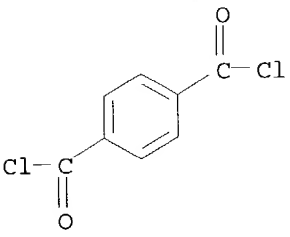

RN 214397-89-4 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxypropyl) ester, polymer with 1,4-benzenedicarbonyl dichloride and ethyl phosphorodichloridate (9CI) (CA INDEX NAME)

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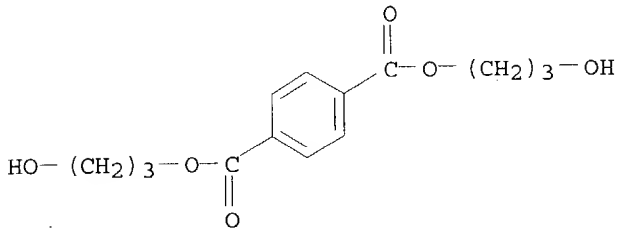
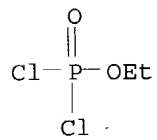
CRN 3644-98-2
CMF C14 H18 O6



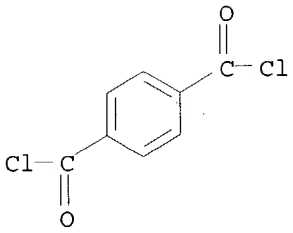
CM 2

CRN 1498-51-7
CMF C2 H5 Cl2 O2 P



CM 3

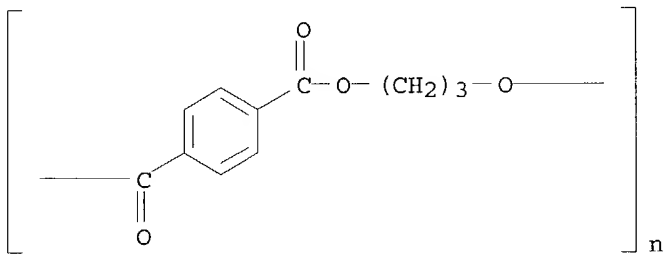
CRN 100-20-9
CMF C8 H4 Cl2 O2



L12 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:417355 HCAPLUS
DOCUMENT NUMBER: 133:164405
TITLE: Synthesis of Cyclic Oligoesters and Their Rapid Polymerization to High Molecular Weight
AUTHOR(S): Burch, Robert R.; Lustig, Steven R.; Spinu, Maria
CORPORATE SOURCE: Central Research and Development Experimental Station, E.I. du Pont de Nemours and Co. Inc., Wilmington, DE, 19880, USA
SOURCE: Macromolecules (**2000**), 33(14), 5053-5064
CODEN: MAMOBX; ISSN: 0024-9297
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We report advances for both synthesizing cyclic oligoesters and tailoring their phys. properties to make ring-opening polymerization more practical for polyester manufacturing Solution and suspension methods provide cyclic oligoesters rapidly with high yield and purity. Both methods can be adapted to continuous process operation using simple, inexpensive raw materials. Synthesis methodol. influences the distribution of cyclic ring sizes. Nonequil. cyclic oligomer distributions produce variant crystal morphologies. Some kinetic cyclic oligoester mixts. have m.ps. remarkably reduced from those previously reported for the pure components. New mixed solvent syntheses, cyclic oligomers, and ring-opening copolymns. are demonstrated. The kinetics and efficiencies of cyclic oligoester polymerization to high mol. weight for homopolymer and copolymers are characterized. A new approach for a continuous, melt-phase ring-opening polymerization is demonstrated which avoids the high temps. normally required to melt cyclic oligomers.

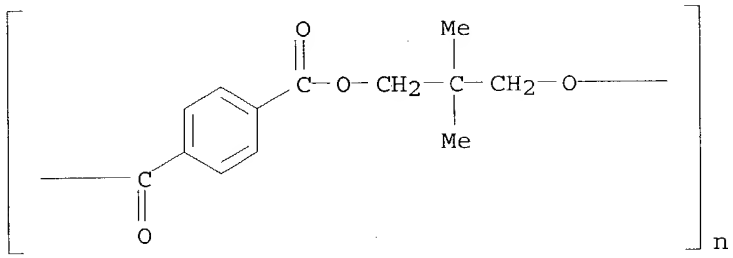
IT **26546-03-2P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis of cyclic oligoesters and their rapid polymerization to high mol. weight)
RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



IT **26546-02-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(synthesis of cyclic oligoesters and their rapid polymerization to high mol. weight)

RN 26546-02-1 HCAPLUS
CN Poly[oxy(2,2-dimethyl-1,3-propanediyl)oxycarbonyl-1,4-phenylenecarbonyl] (9CI) (CA INDEX NAME)



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:684879 HCAPLUS
DOCUMENT NUMBER: 129:306502
TITLE: Biodegradable terephthalate polyester-poly(phosphate) polymers, compositions, articles, and methods for making and using the same
INVENTOR(S): Mao, Hai-quan; Leong, Kam W.; Dang, Wenbin; Lo, Hungnan; Zhao, Zhong; Nowotnik, David P.; English, James P.
PATENT ASSIGNEE(S): Guilford Pharmaceuticals Inc., USA; Johns Hopkins University School of Medicine
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9844021	A1	19981008	WO 1998-US6381	19980402 <--
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RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9869450	A1	19981022	AU 1998-69450	19980402 <--
AU 741145	B2	20011122		
EP 973818	A1	20000126	EP 1998-915208	19980402 <--
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JP 2001519842	T2	20011023	JP 1998-541949	19980402
BR 9809064	A	20020102	BR 1998-9064	19980402
TW 534915	B	20030601	TW 1998-87105028	19980702
NO 9904802	A	19991203	NO 1999-4802	19991001 <--
MX 9909127	A	20000331	MX 1999-9127	19991004 <--

PRIORITY APPLN. INFO.: US 1997-832215 A 19970403
WO 1998-US6381 W 19980402

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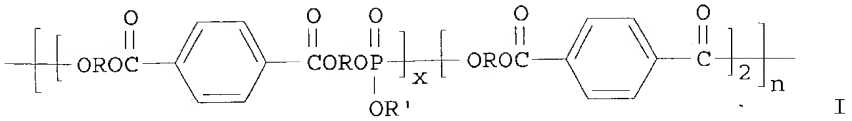


I

AB Biodegradable terephthalate polymers are described comprising the recurring monomeric units I (wherein R is a divalent organic moiety; R' is an aliphatic, aromatic or heterocyclic residue; x is ≥1; and n is 0-50000), wherein the biodegradable polymer is biocompatible before and upon biodegrdn. Processes for preparing the polymers, compns. containing the polymers and biol. active substances, articles useful for implantation or injection into the body fabricated from the compns., and methods for controllably releasing biol. active substances using the polymers, are also described. One example polymer was prepared by treating bis(2-hydroxyethyl) terephthalate with Et phosphorodichloridate and further treatment with terephthaloyl chloride. Glass transition temps. and degradation were studied as well as biocompatibility and microcapsule formation.

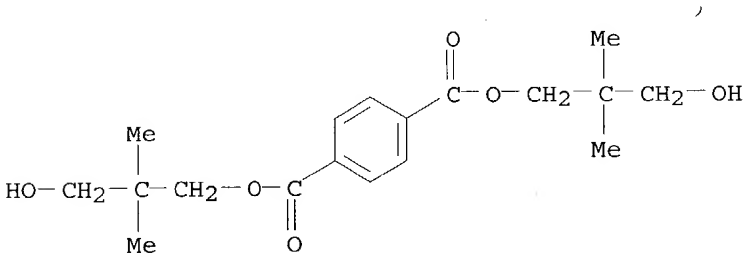
IT **214397-86-1P 214397-87-2P 214397-88-3P**
214397-89-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(biodegradable terephthalate polyester-poly(phosphate) polymers for medical use)

RN 214397-86-1 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxy-2,2-dimethylpropyl) ester, polymer with 1,4-benzenedicarbonyl dichloride and ethyl phosphorodichloridate (9CI) (CA INDEX NAME)

CM 1

CRN 24806-01-7
CMF C18 H26 O6



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CRN 1498-51-7
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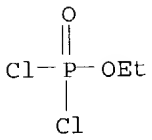

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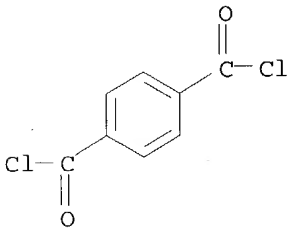
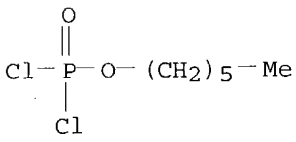
CRN 100-20-9
CMF C8 H4 Cl2 O2



RN 214397-87-2 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxy-2,2-dimethylpropyl) ester, polymer with 1,4-benzenedicarbonyl dichloride and hexyl phosphorodichloridate (9CI) (CA INDEX NAME)

CM 1

CRN 53121-39-4
CMF C6 H13 Cl2 O2 P



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CRN 24806-01-7
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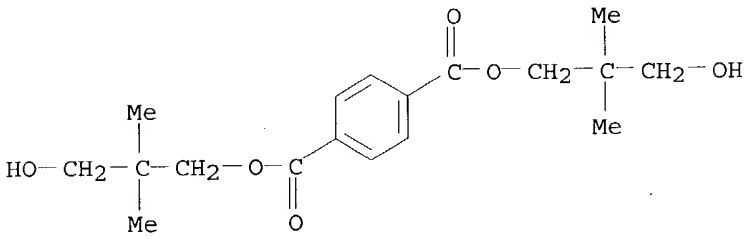

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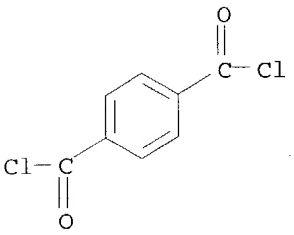
CMF C8 H4 Cl2 O2



RN 214397-88-3 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxy-2,2-dimethylpropyl) ester, polymer with hexyl phosphorodichloridate (9CI) (CA INDEX NAME)

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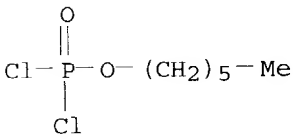
CRN 53121-39-4
CMF C6 H13 Cl2 O2 P



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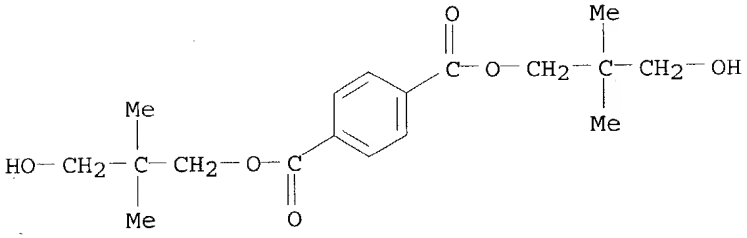

RN 214397-89-4 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxypropyl) ester, polymer with 1,4-benzenedicarbonyl dichloride and ethyl phosphorodichloridate (9CI) (CA INDEX NAME)

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CRN 3644-98-2
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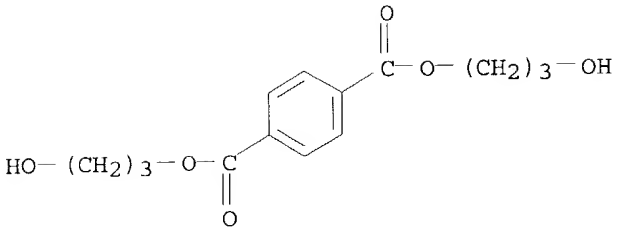

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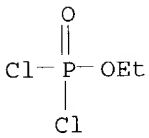

CM 3

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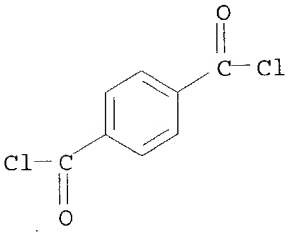
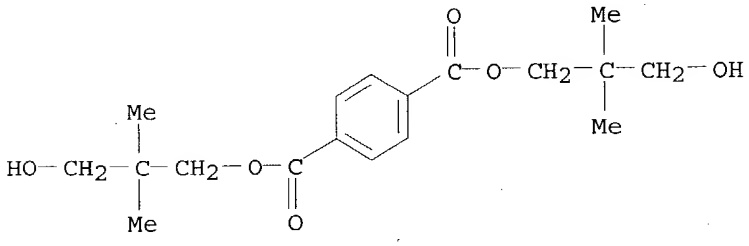


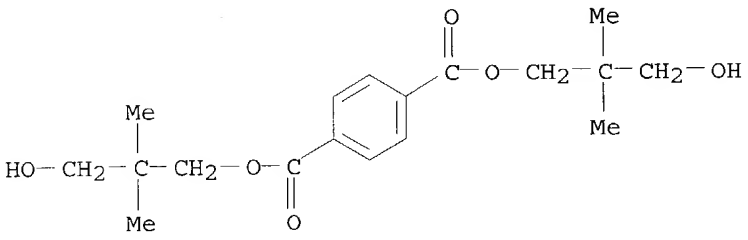
IT **24806-01-7P**, 1,4-Benzenedicarboxylic acid, bis(3-hydroxy-2,2-dimethylpropyl) ester **214397-85-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(biodegradable terephthalate polyester-poly(phosphate) polymers for medical use)
RN 24806-01-7 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxy-2,2-dimethylpropyl) ester (9CI) (CA INDEX NAME)



RN 214397-85-0 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxy-2,2-dimethylpropyl) ester, polymer with ethyl phosphorodichloridate (9CI) (CA INDEX NAME)

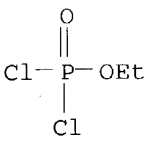
CM 1

CRN 24806-01-7
CMF C18 H26 O6



CM 2

CRN 1498-51-7
CMF C2 H5 Cl2 O2 P



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

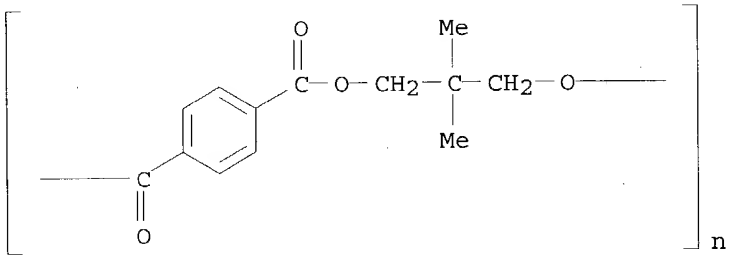
L12 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:672151 HCAPLUS
DOCUMENT NUMBER: 119:272151
TITLE: Intramolecular excimer formation in polyesters from terephthalic acid and six 2R,2R'-propanediols
AUTHOR(S): Mendicuti, Francisco; Mattice, Wayne L.
CORPORATE SOURCE: Dep. Quim. Fis., Univ. Alcala de Henares, Madrid, 28871, Spain
SOURCE: Makromolekulare Chemie (**1993**), 194(10), 2851-60
CODEN: MACEAK; ISSN: 0025-116X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Fluorescence was measured for 6 polyesters derived from terephthalic acid and 6 2R,2R'-propanediols, represented by HOCH2CRR'CH2OH. The solvent effects on the emission spectra permit separation of the 6 polymers into two groups. One group consists of the 5 polyesters in which R and R' are alkyl groups, and the other group has only one member, that being the polyester with R = R' = H. Modeling suggests that the origin of the difference between the 2 groups lies in the access by the polyester with R = R' = H to a conformation (inaccessible when R and R' are alkyl groups) that forms a very tight complex between 2 successive aromatic rings.

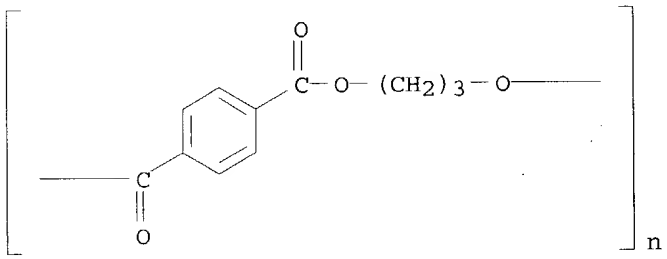
IT **26546-02-1 26546-03-2**
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC

(Process); RACT (Reactant or reagent)
(intramol. excimer formation in, structure in relation to)

RN 26546-02-1 HCAPLUS
CN Poly[oxy(2,2-dimethyl-1,3-propanediyl)oxycarbonyl-1,4-phenylenecarbonyl] (9CI) (CA INDEX NAME)



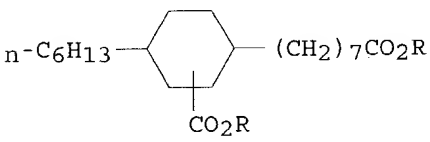
RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



L12 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1988:439364 HCAPLUS
DOCUMENT NUMBER: 109:39364
TITLE: Disperse dye composition for use in solvent dyeing
INVENTOR(S): Wilson, Robert B.; Pomeroy, William F.
PATENT ASSIGNEE(S): Crucible Chemical Co., USA
SOURCE: U.S., 12 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4708719	A	19871124	US 1984-669352	19841108 <--
PRIORITY APPLN. INFO.:			US 1984-669352	19841108

GI

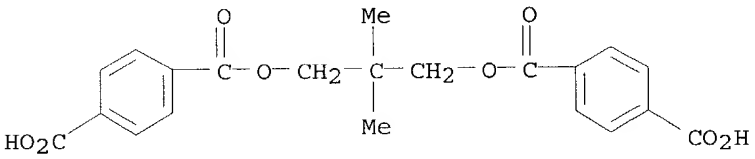


I

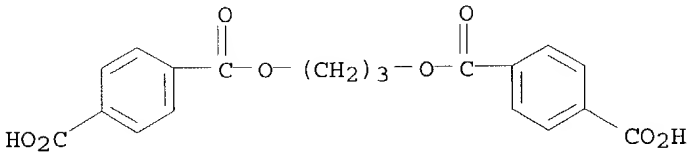
AB The title dye compns. contain 10-95% dry disperse dye mixed with 90-5% of ≥1 of (A) I [R = C4-20 alkyl, HO(CH2CH2O)nCH2CH2, HO(C3H6O)nC3H6, HO(CH2CH2)p(C3H6O)qC3H6, HO(C3H6O)p(CH2CH2O)qCH2CH2, phosphated polyoxyalkylenes; n = 2-22; such that p + q = n], (B) ArCO2R1O2CAr or ArCO2R2 [R1 = C2-8 alkylene, CrH2r(OCrH2r)s; R2 = (un)substituted C8-30 alkenyl; Ar = (un)substituted C<15 mono- or bicyclic aryl; r = 2, 3; s = 1-15], (C) R3 = CO2R4 or (HO)2POOR4 [R3 = Ar, C8-18 alkyl; R4 = 4-(CaH2a+1) C6H4 O(CH2CH2O)bCH2CH2, Me(CH2)cO(CH2CH2O)dCH2CH2; a = 0-12; b = 124; c = 7-22; d 1-24], providing a com. acceptable disperse dye concentrate of consistent strength and hue. Thus, a dye composition was prepared from mixing 65 parts I (R = 2-ethylhexyl) with 15 parts lauryl benzoate, heating the mixture to 120°, and adding 20 parts C.I. Disperse Violet 27. Base composition resulting from the cool mixture was readily incorporated into high-boiling I solvent bath, which were stable at .apprx.180°.

IT **24854-59-9 114078-82-9**
RL: USES (Uses)
(dye auxiliaries, manufacture of disperse dye compns. containing)

RN 24854-59-9 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, 2,2-dimethyl-1,3-propanediyl ester (9CI) (CA INDEX NAME)



RN 114078-82-9 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, 1,3-propanediyl ester (9CI) (CA INDEX NAME)



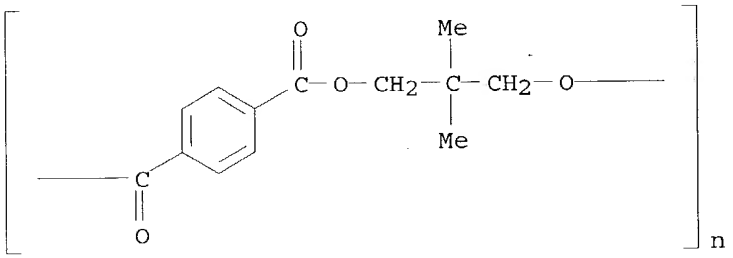
L12 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1983:143934 HCAPLUS
DOCUMENT NUMBER: 98:143934
TITLE: Cyclic oligomers in polyesters from diols and aromatic dicarboxylic acids
AUTHOR(S): Wick, Gottfried; Zeitler, Herbert
CORPORATE SOURCE: Werk Bobingen, Faserforsch., Hoechst A.-G., Bobingen, D-8903, Fed. Rep. Ger.
SOURCE: Angewandte Makromolekulare Chemie (**1983**), 112, 59-94
CODEN: ANMCBO; ISSN: 0003-3146
DOCUMENT TYPE: Journal
LANGUAGE: German

AB Cyclic oligomers in polyesters from diols and aromatic dicarboxylic acids were separated and determined quant. by high-pressure liquid chromatog. The cyclic oligomer content was related to the composition of the polyesters and the method of polymerization Cyclic dimers predominated in all polyesters except poly(ethylene terephthalate) [25038-59-9], poly(1,4-

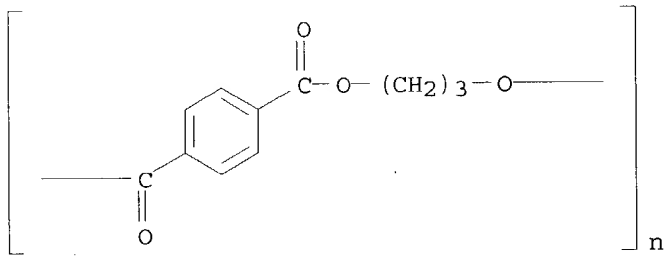
cyclohexylenedimethylene terephthalate) [24936-69-4], and poly(p-phenylenedimethylene terephthalate) [26468-49-5], in which ring strain caused cyclic trimers to predominate. Stereoisomeric cyclooligomers formed from cis- and trans-1,4-cyclohexanedimethanol could be separated

IT **26546-02-1 26546-03-2**
RL: USES (Uses)
(cyclic oligomer determination in, by high-pressure liquid chromatog.)

RN 26546-02-1 HCAPLUS
CN Poly[oxy(2,2-dimethyl-1,3-propanediyl)oxycarbonyl-1,4-phenylenecarbonyl] (9CI) (CA INDEX NAME)



RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



L12 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1977:55928 HCAPLUS
DOCUMENT NUMBER: 86:55928
TITLE: Aromatic polyesters
INVENTOR(S): Uno, Keiichi; Kotera, Nobukazu
PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

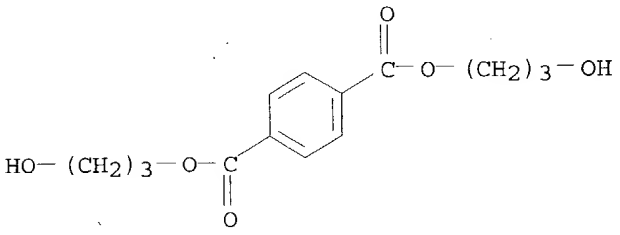
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 51130500	A2	19761112	JP 1975-56296	19750510 <--
PRIORITY APPLN. INFO.:			JP 1975-56296	19750510

AB In ester-exchange polycondensation of 8 bis(hydroxyalkyl) terephthalates with hydroquinone or bisphenol A in the presence of K Ti oxalate, only bis(4-hydroxybutyl) terephthalate showed complete ester exchange with hydroquinone.

IT **61778-30-1P 61778-54-9P**
RL: PREP (Preparation)
(preparation of)
RN 61778-30-1 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxypropyl) ester, polymer with 1,4-benzenediol (9CI) (CA INDEX NAME)

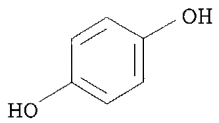
CM 1

CRN 3644-98-2
CMF C14 H18 O6



CM 2

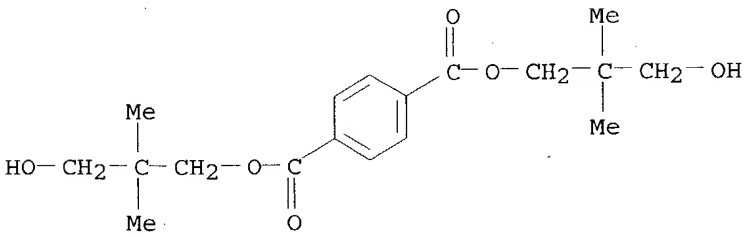
CRN 123-31-9
CMF C6 H6 O2



RN 61778-54-9 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxy-2,2-dimethylpropyl) ester, polymer with 1,4-benzenediol (9CI) (CA INDEX NAME)

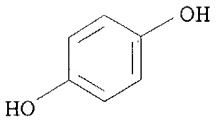
CM 1

CRN 24806-01-7
CMF C18 H26 O6

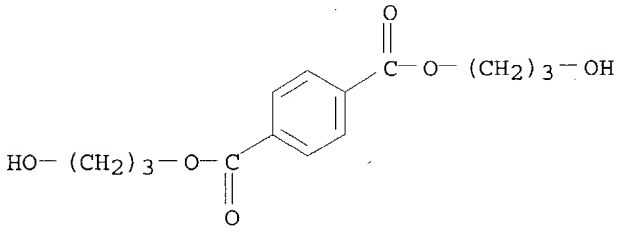


CM 2

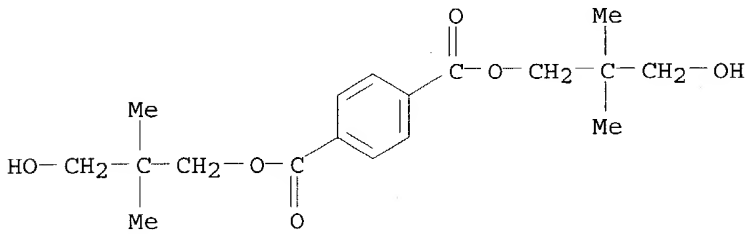
CRN 123-31-9
CMF C6 H6 O2



L12 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1977:43368 HCAPLUS
DOCUMENT NUMBER: 86:43368
TITLE: Synthesis of bis(ω-hydroxyalkyl)terephthalates
AUTHOR(S): Skoracki, Jerzy
CORPORATE SOURCE: Dep. Chem. Fibres, Polytech. Univ. Szczecin, Szczecin, Pol.
SOURCE: Roczniki Chemii (**1976**), 50(5), 971-2
CODEN: ROCHAC; ISSN: 0035-7677
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Transesterification of p-(RO2C)2C6H4 (I; R = Me) with HO(CH2)nOH (n = 3-6) or neopentylene glycol in the presence of Pb(OAc)4 at 458 K gave I [R = HO(CH2)n (n = 3-6), HOCH2CMe2CH2].
IT **3644-98-2P 24806-01-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 3644-98-2 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxypropyl) ester (9CI) (CA INDEX NAME)



RN 24806-01-7 HCAPLUS
CN 1,4-Benzenedicarboxylic acid, bis(3-hydroxy-2,2-dimethylpropyl) ester (9CI) (CA INDEX NAME)

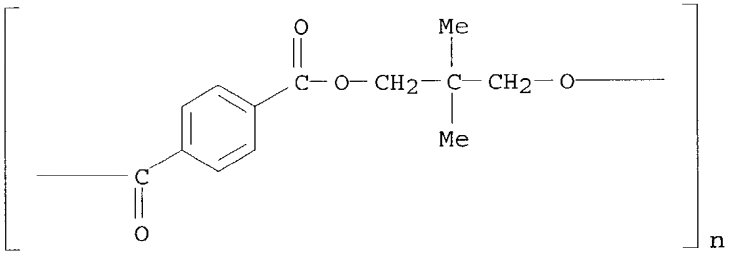


L12 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1970:123008 HCAPLUS
DOCUMENT NUMBER: 72:123008
TITLE: Polyester hot-melt adhesives. I. Factors affecting adhesion to epoxy resin coatings
AUTHOR(S): Jackson, Winston J., Jr.; Gray, Theodore F., Jr.;

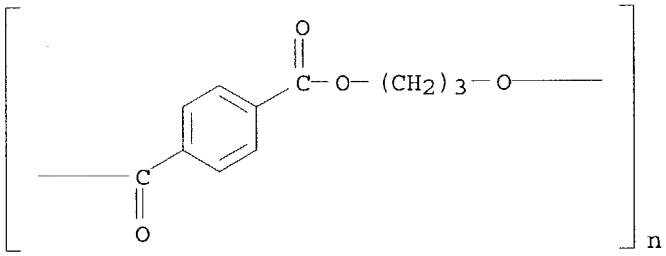
Caldwell, J. R.
CORPORATE SOURCE: Tennessee Eastman Co. Div., Eastman Kodak Co., Kingsport, TN, USA
SOURCE: Journal of Applied Polymer Science (**1970**), 14(3), 685-98
CODEN: JAPNAB; ISSN: 0021-8995
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The peel strength and tensile shear strength of polyester hot-melt adhesives on metals coated with epoxy resins are affected by four characteristics of the polyester: (1) inherent viscosity, (2) glass transition temperature (tg, (3) degree of crystallinity (DC), and (4) melting point. The inherent viscosity affects the strength, toughness, and crystallinity of the adhesive. The Tg and DC affect the low-temperature adhesive properties; the peel strength is relatively low when the Tg is appreciably above the use temperature The Tg, DC, and melting point affect the high-temperature adhesive properties. A hot-melt adhesive with high peel and tensile shear strengths from 0° to 120° is the polyester of 1,4-butanediol and trans-1,4-cyclohexanedicarboxylic acid.

IT **26546-02-1 26546-03-2**
RL: USES (Uses)
(adhesives, yield strength of, crystallinity-glass temperature in relation to)

RN 26546-02-1 HCAPLUS
CN Poly[oxy(2,2-dimethyl-1,3-propanediyl)oxycarbonyl-1,4-phenylenecarbonyl] (9CI) (CA INDEX NAME)



RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



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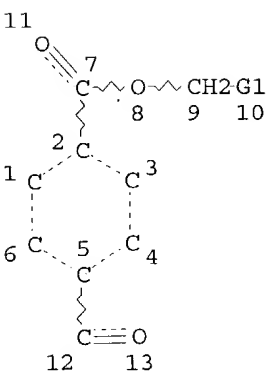

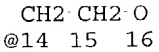

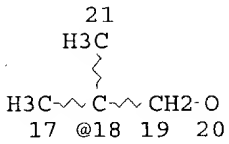

VAR G1=14/18
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

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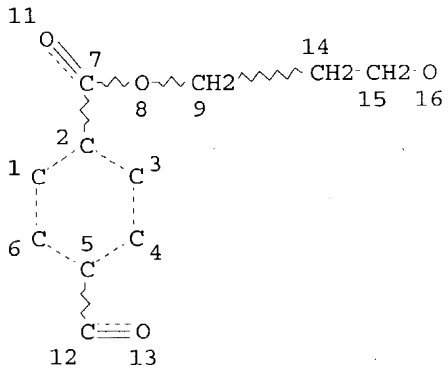
L4	1440	SEA FILE=HCAPLUS ABB=ON PLU=ON L3
L5	522	SEA FILE=HCAPLUS ABB=ON PLU=ON L4 AND PD=<DECEMBER 8, 2000
L6		STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

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L8	38	SEA FILE=REGISTRY ABB=ON PLU=ON L3 NOT L7
L9	1336	SEA FILE=HCAPLUS ABB=ON PLU=ON L7
L10	114	SEA FILE=HCAPLUS ABB=ON PLU=ON L8
L11	10	SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L10
L21	50	SEA FILE=HCAPLUS ABB=ON PLU=ON L4(L)?CRYSTALLIZ?
L22	11	SEA FILE=HCAPLUS ABB=ON PLU=ON L21 AND L5
L23	11	SEA FILE=HCAPLUS ABB=ON PLU=ON L22 NOT L11

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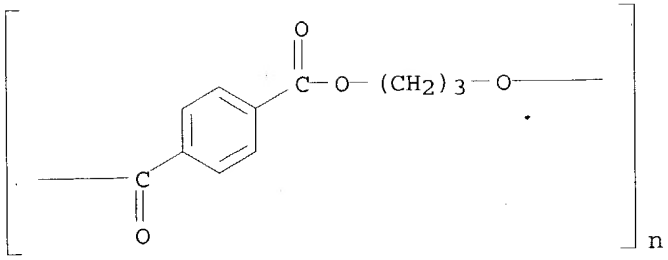
L23 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:814543 HCAPLUS
DOCUMENT NUMBER: 133:350725
TITLE: Process and apparatus for crystallization of polytrimethylene terephthalate
INVENTOR(S): Chen, Ye-mon; Corey, Ann Marie; Duh, Ben
PATENT ASSIGNEE(S): Shell Internationale Research Maatschappij BV, Neth.
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2000068294	A1	20001116	WO 2000-EP4399		20000509 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
US 6297315	B1	20011002	US 1999-309923		19990511
US 6461575	B1	20021008	US 1999-309921		19990511
EP 1177235	A1	20020206	EP 2000-931229		20000509
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
TR 200103226	T2	20020422	TR 2001-200103226		20000509
JP 2002544303	T2	20021224	JP 2000-616263		20000509
PRIORITY APPLN. INFO.:			US 1999-309921	A	19990511
			US 1999-309923	A	19990511
			WO 2000-EP4399	W	20000509

AB A process for reducing the self-adhesiveness of polytrimethylene terephthalate (I) pellets comprises contacting melt-phase-polymerized I pellets having an intrinsic viscosity of ≥0.4 dL/g with an aqueous liquid at 65-100° for a time sufficient to induce a degree of crystallinity of ≥35% in the I pellets. A crystallization apparatus was also provided.

IT **26546-03-2**
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(process and apparatus for **crystallization** of polytrimethylene terephthalate)

RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



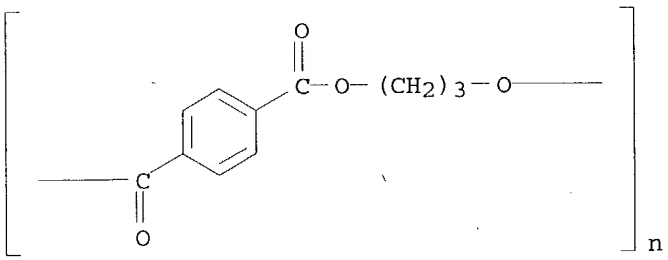
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:667829 HCAPLUS
DOCUMENT NUMBER: 134:179022
TITLE: Studies on the molecular structure and crystallization kinetics of polytrimethylene terephthalate
AUTHOR(S): Chen, Guokang; Huang, Xiangan; Gu, Lixia
CORPORATE SOURCE: State Key Lab. Modification Chem. Fibers Polymer Materials, China Textile University, Shanghai, 200051, Peop. Rep. China
SOURCE: Sen'i Gakkaishi (**2000**), 56(8), 396-401
CODEN: SENGA5; ISSN: 0037-9875
PUBLISHER: Sen'i Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Making use of IR and 1H NMR spectra, we characterized the mol. structure of poly(trimethylene terephthalate) (PTT), and compared it with poly(butylene terephthalate) (PBT) and poly(ethylene terephthalate) (PET). The crystallization kinetics for PTT was compared with those for PBT and PET. The crystallization activation energies of these three polyesters were weakened in the order of PET > PTT > PBT. It seems that the difference in the flexibility of mol. chains influences the crystallization activation energies.

IT **26546-03-2**, Poly(trimethylene terephthalate), sru
RL: PRP (Properties)
(mol. structure and **crystallization** kinetics of poly(trimethylene terephthalate))

RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:278031 HCAPLUS
DOCUMENT NUMBER: 132:308853

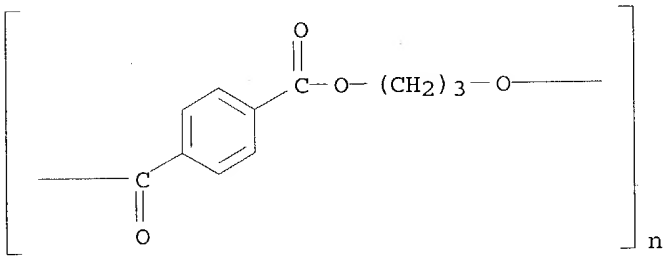
TITLE: Apparatus and method for granulating and crystallizing thermoplastic polyesters or copolyesters
INVENTOR(S): Matthaei, Andre
PATENT ASSIGNEE(S): Rieter Automatik G.m.b.H., Germany
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000023497	A1	20000427	WO 1999-EP6617	19990908 <--
W: BR, CA, CN, IN, JP, KR, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19848245	A1	20000504	DE 1998-19848245	19981020 <--

PRIORITY APPLN. INFO.: DE 1998-19848245 19981020

AB The polyesters or copolyesters are introduced into a liquid after partial polycondensation into an intermediate product. The liquid accelerates the crystallization process of the polyester and the state of crystallization once the intermediate product has entered said liquid, whereby the liquid is kept at over 100° or said liquid produces crystallization germs on the surface of the intermediate product. Typical liqs. are ethylene glycol, triethylene glycol, and their mixts. with each other or with water.

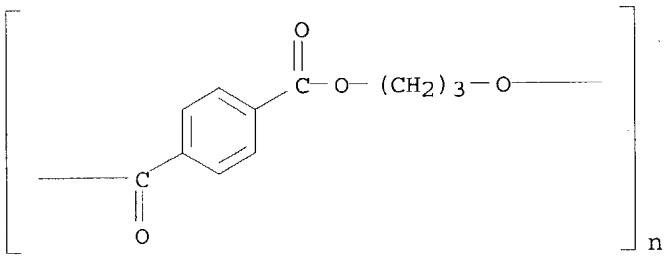
IT **26546-03-2**
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(apparatus and method for granulating and **crystallizing** thermoplastic polyesters or copolyesters)
RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:240052 HCAPLUS
DOCUMENT NUMBER: 133:5166
TITLE: Crystallization and melting behaviors of poly(trimethylene terephthalate)
AUTHOR(S): Huang, Jieh-Ming; Ju, Ming-Yih; Chu, Peter P.; Chang, Feng-Chih
CORPORATE SOURCE: Institute of Applied Chemistry, National Chiao-Tung University, Hsinchu, 30010, Taiwan
SOURCE: Journal of Polymer Research (**1999**), 6(4), 259-266
CODEN: JPOREP; ISSN: 1022-9760
PUBLISHER: Polymer Society, Taipei

DOCUMENT TYPE: Journal
LANGUAGE: English
AB The crystallization and melting behavior of poly(trimethylene terephthalate) (PTT) were studied by DSC, wide-angle x-ray diffraction (WAXD), and solid-state NMR. At certain crystallization temps. for a given time, the isothermally crystallized PTT exhibits two melting endotherms, which is similar to that of PET and PBT. At higher crystallization temps., the low-temperature endotherm is related to the melting of the original crystals, while the high-temperature endotherm is associated with the melting of crystals recrystd. during heating. The peak temps. of these double-melting endotherms depend on crystallization temperature, crystallization time, and cooling rate from the melt as well as the subsequent heating rate. At a low cooling rate (0.2°/min) or a high heating rate (40°/min), these two endotherms tend to coalesce into a single endotherm, which is considered as complete melting without reorganization. WAXD results confirm that only one crystal structure exists in the PTT sample regardless of the crystallization conditions, even with the appearance of double melting endotherms. The results of NMR reveal that the annealing treatment increases proton spin lattice relaxation time in the rotation frame of PTT. This phenomenon suggests that the mobility of the PTT mols. decreases after the annealing process.
IT **26546-03-2**, Poly(trimethylene terephthalate) sru
RL: PRP (Properties)
(**crystallization** and melting behavior of)
RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



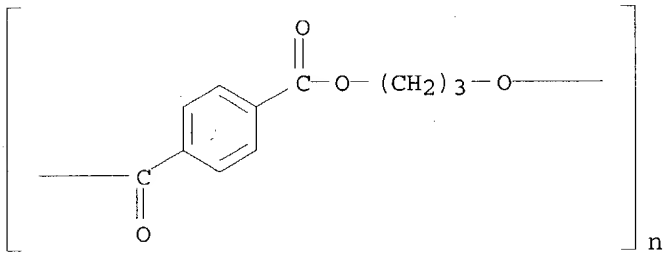
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:203003 HCAPLUS
DOCUMENT NUMBER: 132:322350
TITLE: Crystallization kinetics of poly(trimethylene terephthalate)
AUTHOR(S): Huang, Jieh-Ming; Chang, Feng-Chih
CORPORATE SOURCE: Department of Chemical Engineering, Van Nung Institute of Technology, Chung-Li, 32054, Taiwan
SOURCE: Journal of Polymer Science, Part B: Polymer Physics (**2000**), 38(7), 934-941
CODEN: JPBPEM; ISSN: 0887-6266
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The isothermal crystallization kinetics of poly(trimethylene terephthalate) (PTT) have been investigated using differential scanning calorimetry (DSC) and polarized light microscopy (PLM). Enthalpy data of exotherm from

isothermal crystallization were analyzed using the Avrami theory. The average value of the Avrami exponent, n, is about 2.8. From the melt, PTT crystallizes according to a spherulite morphol. The spherulite growth rate and the overall crystallization rate depend on crystallization temperature The increase in the spherulitic radius was examined by polarized light microscopy. Using values of transport parameters common to many polymers (U* = 1500 cal/mol, T∞ = Tg - 30°C) together with exptl. determined values of Tm0 (248°C) and Tg (44°C), the nucleation parameter, kg, for PTT was determined On the basis of secondary nucleation analyses, a transition between regimes III and II was found in the vicinity of 194°C (ΔT .simeq. 54 K). The ratio of kg of these two regimes is 2.1, which is very close to 2.0 as predicted by the Lauritzen-Hoffman theory. The lateral surface-free energy, σ = 10.89 erg/cm2 and the fold surface-free energy, σc = 56.64 erg/cm2 were determined The latter leads to a work of chain-folding, q = 4.80 kcal/mol folds, which is comparable to PET and PBT previously reported.

IT **26546-03-2**, Poly(trimethylene terephthalate), sru
RL: PRP (Properties)
(**crystallization** kinetics of poly(trimethylene terephthalate))

RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)

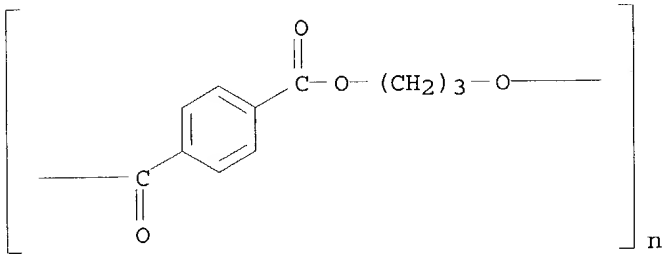


REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:158337 HCAPLUS
DOCUMENT NUMBER: 130:197199
TITLE: Isothermal crystallization behavior and some physical parameters of poly(trimethylene terephthalate)
AUTHOR(S): Lee, Kyung Min; Kim, Kap Jin; Kim, Young Ho
CORPORATE SOURCE: Department of Textile Eng., Soong-Sil University, Seoul, 156-743, S. Korea
SOURCE: Polymer (Korea) (**1999**), 23(1), 56-65
CODEN: POLLDG; ISSN: 0379-153X
PUBLISHER: Polymer Society of Korea
DOCUMENT TYPE: Journal
LANGUAGE: Korean

AB The isothermal crystallization behavior of poly(trimethylene terephthalate) (PTMT), which was obtained from the polymerization of terephthalic acid and 1,3-propanediol, was analyzed by DSC and some phys. parameters were calculated The Avrami exponents for isothermal crystallization were 2.8.apprx.3.2 at various crystallization temps. The regime transition of PTMT was not found at the range of 180.apprx.200° and the Lauritzen Z-test showed that the isothermal crystallization of PTMT followed regime II kinetics. The surface free energy of the side surface (σ) of PTMT was 10.37 erg/cm2 and that of the end surface (σe) was 101.20 erg/cm2, and the work required to form a fold (q) was 33.03 kJ/mol.

IT **26546-03-2**, Poly(trimethylene terephthalate)
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(isothermal **crystallization** and surface free energy of)
RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)

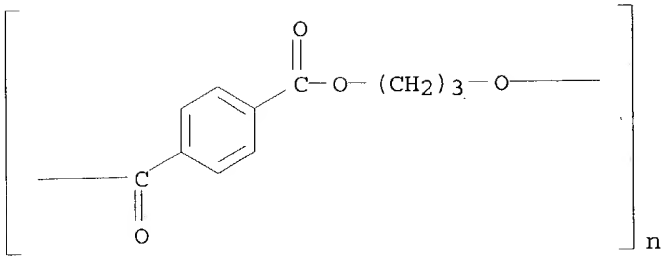


L23 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:294994 HCAPLUS
DOCUMENT NUMBER: 128:308942
TITLE: Melting and non-isothermal crystallization behaviors of poly(trimethylene terephthalate)
AUTHOR(S): Kim, Young Ho; Kim, Kap Jin; Lee, Kyung Min
CORPORATE SOURCE: Department of Textile Engineering, Soong-Sil University, Seoul, 156-743, S. Korea
SOURCE: Han'guk Somyu Konghakhoechi (**1997**), 34(12), 860-867
CODEN: HSKCDQ; ISSN: 1225-1089
PUBLISHER: Korean Fiber Society
DOCUMENT TYPE: Journal
LANGUAGE: Korean

AB Poly(trimethylene terephthalate) (PTMT) was prepared from terephthalic acid and 1,3-propanediol, and its basic thermal properties, e.g., Tg, melting temperature and non-isothermal crystallization behavior were investigated by using DSC.

The Tg of PTMT is 39.5°, which is much lower than that of PET. The equilibrium melting temperature of 244.1° was obtained from Hoffman-Weeks plots. Multiple melting curves were observed both in isothermally and non-isothermally crystallized samples. In non-isothermal crystallization, the Avrami exponent (.apprx.2.7) and the activation energy (165 kJ/mol) were obtained using Ozawa's modified Avrami equation.

IT **26546-03-2**, 1,3-Propanediol-terephthalic acid copolymer sru
RL: PRP (Properties)
(thermal and non-isothermal **crystallization** behavior of poly(trimethylene terephthalate))
RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



L23 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:9185 HCAPLUS
DOCUMENT NUMBER: 120:9185
TITLE: Composition and preparation of sulfonate-terminated polyesters, and their blends with other polyesters
INVENTOR(S): Kawaguchi, Kuniaki; Nakane, Toshio; Hijikata, Kenji
PATENT ASSIGNEE(S): Polyplastics Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 517511	A2	19921209	EP 1992-305098	19920603 <--
EP 517511	A3	19930203		
EP 517511	B1	19971105		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE				
JP 04356525	A2	19921210	JP 1991-131235	19910603 <--
JP 04359050	A2	19921211	JP 1991-131236	19910603 <--
JP 2807580	B2	19981008		
BR 9202121	A	19930202	BR 1992-2121	19920603 <--
US 5302690	A	19940412	US 1992-892898	19920603 <--
AT 159959	E	19971115	AT 1992-305098	19920603 <--
PRIORITY APPLN. INFO.:			JP 1991-131235	19910603
			JP 1991-131236	19910603

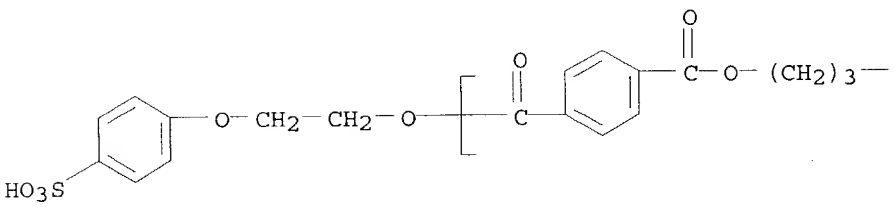
OTHER SOURCE(S): MARPAT 120:9185

AB Polyesters with high crystallization rates, heat resistance, mech. strength, and moldability are manufactured by transesterification of a lower alkyl ester of an aromatic diacid with an aliphatic diol in the presence of 0.02-3 mol% HOROZSO3M (R = CH2CH2, CHMeCH2, CH2CHMe, or CH2CH2OCH2CH2, Z = p-C6H4 or 2,6-naphthylene, M = Li, Na, or K) by use of a Ti catalyst and polycondensation of the product. Thus, transesterification of di-Me terephthalate with 1,4-butanediol and 1 mol% Na p-(2-hydroxyethoxy)benzenesulfonate (I) in the presence of (BuO)4Ti and polycondensation of the product gave a polymer containing 1 mol% I.

IT **147769-15-1P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of, with high **crystallization** rates and mech. strength and moldability)

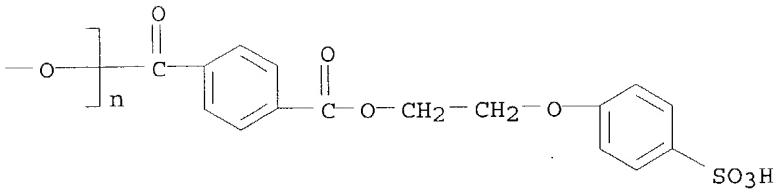
RN 147769-15-1 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl), α-[4-[[2-(4-sulfophenoxy)ethoxy]carbonyl]benzoyl]-ω-[2-(4-sulfophenoxy)ethoxy]-, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Na

PAGE 1-B



L23 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1986:6688 HCAPLUS
DOCUMENT NUMBER: 104:6688
TITLE: Poly(ethylene terephthalate) molding composition
INVENTOR(S): Nelsen, Suzanne B.
PATENT ASSIGNEE(S): GAF Corp., USA
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4539356	A	19850903	US 1984-661743	19841017 <--
CA 1263787	A1	19891205	CA 1985-488357	19850808 <--
EP 178807	A2	19860423	EP 1985-306712	19850920 <--
EP 178807	A3	19870422		
EP 178807	B1	19901003		
R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
JP 61097353	A2	19860515	JP 1985-206745	19850920 <--
BR 8504638	A	19860715	BR 1985-4638	19850923 <--
PRIORITY APPLN. INFO.:			US 1984-661743	19841017

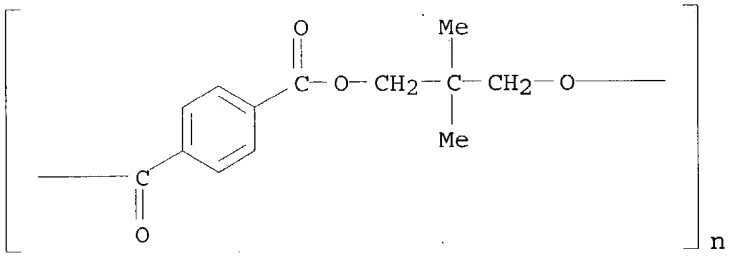
AB Blends of poly(ethylene terephthalate) (I) [25038-59-9] with aliphatic glycol isophthalate polymers and alkaline taurate or isethionate derivs., optionally containing glass fibers, have good processing, appearance, and **crystallization** rates, and high heat distortion temperature Thus, a blend of I 70, glass fibers (3/16 in.) 30, antioxidant (Irganox 1010) 0.3, stabilizer (Epon 828) 0.6, talc 0.5, poly(neopentyl terephthalate) [**26546-02-1**] 5.7, and Na N-methyl-N-oleoyltaurate [137-20-2] 1.5 parts was injection molded to give flexural modulus 26800 psi, heat distortion temperature (at 66 psi) 241°, unnotched Izod impact 8

ft.-lb./in., satisfactory appearance, and no mold sticking.

IT **26546-02-1**
RL: USES (Uses)
(blends with poly(ethylene terephthalate), molding of, crystal nucleation agents for)

RN 26546-02-1 HCAPLUS

CN Poly[oxy(2,2-dimethyl-1,3-propanediyl)oxycarbonyl-1,4-phenylenecarbonyl] (9CI) (CA INDEX NAME)



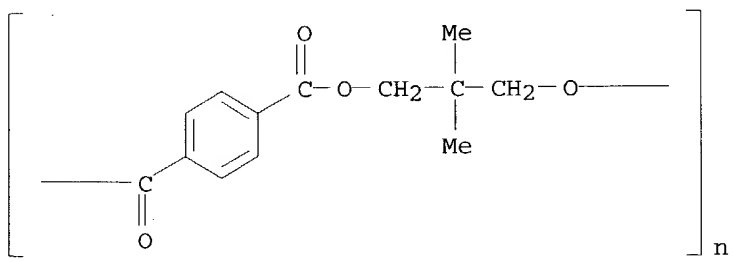
L23 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1979:492103 HCAPLUS
DOCUMENT NUMBER: 91:92103
TITLE: DSC investigation of interchange reactions in the melt of different polyesters
AUTHOR(S): Budin, J.; Vanicek, J.
CORPORATE SOURCE: Res. Dep., Chemopetrol-Silon, Sezimovo Usti, Czech.
SOURCE: Thermochimica Acta (**1979**), 28(1), 15-21
CODEN: THACAS; ISSN: 0040-6031
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The course of randomization in the melt of poly(ethylene terephthalate) [25038-59-9] with poly(ethylene isophthalate) [26948-62-9], poly(2,2-dimethyltrimethylene terephthalate) [**26546-02-1**], or poly(tetramethylene terephthalate) [24968-12-5] during melt blending under N at 280° was observed by determining changes in glass transition temperature (Tg), cold **crystallization** temperature (Tc), and m.p. as measured by differential scanning calorimetry. The m.p. of isothermally-annealed copolyesters is the most useful criterion for randomization. Tg And Tc are influenced by further processes occurring during melt-blending of homopolyesters, e.g. changes in mol. weight and mol. weight distribution.

IT **26546-02-1**
RL: USES (Uses)
(randomization of, in polyester blend melts, thermal properties in relation to)

RN 26546-02-1 HCAPLUS

CN Poly[oxy(2,2-dimethyl-1,3-propanediyl)oxycarbonyl-1,4-phenylenecarbonyl] (9CI) (CA INDEX NAME)



L23 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1969:5191 HCAPLUS
DOCUMENT NUMBER: 70:5191
TITLE: High viscosity linear condensation polyesters from partially polymerized glycol terephthalates
INVENTOR(S): Heighton, Harold H.; Most, Elmer E., Jr.
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

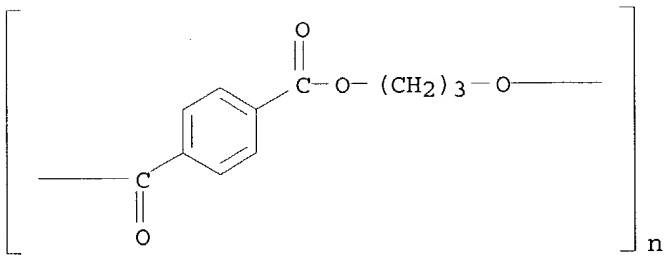
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3405098	A	19681008	US 1965-513616	19651029 <--

PRIORITY APPLN. INFO.: US 1965-513616 19651029

AB Amorphous prepolymer chips of poly(ethylene terephthalate) having an intrinsic viscosity of 0.20-0.65 were preheated at 150-200° to partially crystallize the prepolymer and were ground into particles passing a 20-mesh screen. The polyester was then polymerized to an intrinsic viscosity of at least 0.8 by heating the particles at 200-35° in a fluidized bed. Thus, bis(β-hydroxyethyl) terephthalate was continuously prepared from ethylene glycol and di-Me terephthalate according to U.S. 2,829,153 using a manganous acetate and Sb2O3 catalyst. The monomer was polymerized at 270° and 4 mm. Hg and the molten prepolymer was extruded onto a chilled casting wheel to obtain a prepolymer having an intrinsic viscosity of 0.40. The amorphous prepolymer was crystallized by heating at 160° for 2 hrs. before grinding to a particle size of 60-80 mesh. The cold, ground prepolymer was heated for 12 hrs. at 160°, charged directly to a fluidized-bed polymerizer, and heated to 200° over 1.25 hrs. The temperature was increased to 220° over 3 hrs. and maintained at this temperature for 18 hrs. and 35 min. Dry, hot, inert gas was passed through the bed to remove volatiles, supply heat, and maintain fluidization. A sample removed at the end of the polymerization had an intrinsic viscosity of 1.22. The process was also suitable for preparing high-viscosity poly(trimethylene terephthalate).

IT **26546-03-2**
RL: PROC (Process)
(**crystallization** of)

RN 26546-03-2 HCAPLUS
CN Poly(oxy-1,3-propanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



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